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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,882	03/25/2004	Matthew E. Gande	LA/1-22869/PI/CGC 2147	7795
324 7590 02/25/2008				
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EXAMINER				
TOOMER, CEPHIA D				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
02/25/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/809,882

**Applicant(s)**

GANDE ET AL.

**Examiner**

Cephia D. Toomer

**Art Unit**

1797

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 13-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Office action is in response to the amendment filed August 22, 2007 in which claims 1 and 21 were amended.

The rejection of the claims under 35 U.S.C. 103(a) over Cahill and Fava is withdrawn in view of the amendment to the claims.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 13-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fava (US 5,460,634) in view of Titanium Metals Corp. of America v. Banner.

Fava discloses a diesel fuel composition comprising a diesel fuel, a cetane improver, and a nitroxide compound. An exemplified cetane number of the fuel of Fava is disclosed as 51.3 (example 1). Cetane improvers are organic nitrates such as 2-ethylhexyl nitrate (col. 5, lines 45-48). Stable nitroxide compounds can comprise a nitroxyl moiety flanked by two tertiary carbon atoms, where the flanking carbon atoms may be linked by bridging groups. Further, a specific example of the stable nitroxide compound is 4-hydroxy-2,2,6,6-tetramethylpiperdinyloxy (col. 2, lines 53-66; col. 3, lines 1-40). The nitroxide can be found present in an amount from 1 to 1000 ppm, by weight, based on the weight of the entire formulation (col. 3, lines 40-50). Other additives, such

as amine-formaldehyde products as antioxidants can be included in the composition in an amount of from 5 to 500 ppm by weight, examples of which are well known in the art (col. 6, lines 26-40). Additionally, relative proportions of the additives to one another is 1:500 to 500:1 parts by weight, which includes 1:10 to 10:1 parts by weight (col. 6, lines 44-47). Further, filterability is improved through reduction of particulates (table 1, col. 7).

It is the examiner's position that the reduction of particulates would reduce clogging of filters, and would thereby improve filterability. Fava is silent with respect to the cetane number being less than or equal to 50. It is the examiner's position that the fuel composition of Fava, including a diesel fuel having a cetane number of 51.3, would have the same properties as one including a fuel with a cetane number of less than or equal to 50. Further, the additives produce the same effects and perform the same function as the instant application that the examiner believes the slight difference in cetane number would not change the overall composition of the fuel. Applicant's attention is drawn to *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775,227 USPQ 773 (Fed. Cir. 1985), which states that claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to utilize a fuel having a cetane number less than or equal to 50 as the fuel in Fava because it is close enough to the claimed cetane number that it would be expected to have the same properties.

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3. Claims 16 and 21 are rejected under 35 U.S.C. 103(a) over Fava in view of *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985), and further in view of Pialet (4934303).

The discussion of Fava and *Titanium Metals Corp. of America v. Banner* in the paragraphs above is herein incorporated by reference.

Fava is silent with respect to: (i) the inclusion of at least one antioxidant compound selected from the group consisting of aromatic amine antioxidants and hindered phenolic antioxidants.

Pialet discloses a diesel fuel composition comprising diesel fuel, cetane improver, and antioxidants such as hindered phenols and aromatic amines. The antioxidant is beneficial to the composition because they prevent accumulation of organic peroxides (col. 7, lines 3-15).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to utilize the antioxidants of Pialet in the composition of Fava in order to incorporate beneficial properties of preventing accumulation of organic peroxides.

4. Applicant's arguments have been fully considered but they are not persuasive.

5. Applicant argues that the fuel of Fava has a cetane number of 51.3 and would not need a cetane improver. Applicant argues that unexpected results are obtained when the claimed compounds are combined with diesel fuel with a cetane number less than or equal to 50.

6. Applicant's data is not unexpected because Fava teaches that the diesel fuel may have a specification that includes a minimum flash point of 38 C and a 90% distillation point between 282 C and 338 C. These diesel fuels include diesel fuels wherein the cetane number is less than or equal to 50. Furthermore, it is well settled that a reference is relied upon for all that it teaches and is not limited to the examples contained therein. Fava teaches diesel fuels that are within the scope of the present invention that may be combined with 2-ethylhexyl nitrate and 4-hydroxy-2,2,6,6-tetramethylpiperindinyloxy. Therefore, Fava renders obvious the claimed invention.
7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cephia D. Toomer/  
Primary Examiner  
Art Unit 1797

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